

REMARKS

Claims 1-8 are pending in this application. By this Amendment, claims 1, 2 and 8 are amended. No new matter is added.

I. Allowable Subject Matter

The indication of allowable subject matter in claim 7 is appreciated, it being allowable if rewritten in independent form to include all of the features of its base claim and any intervening claims. Claim 7, as well as the remaining pending claims, are in condition for allowance for the reasons discussed below.

II. Claim Rejections Under 35 U.S.C. §103

Claims 1, 5 and 6 are rejected under 35 U.S.C. §103(a) as unpatentable over JP 02973577 (JP 577) in view of U.S. Patent 6,380,833 to Nguyen et al. (Nguyen). The rejection is respectfully traversed.

Neither JP 577 or Nguyen, whether considered alone or in combination, disclose or suggest each and every feature recited in the pending claims. For example, the combination of references fails to disclose or suggest an electromagnetic switch for a starter, comprising *inter alia* ... a switch cover having two external terminals and two coil terminals and being fixed to the switch casing, one of the external terminals of the switch cover being a battery terminal connected to a battery, the other one of the external terminals being a motor terminal connected to a motor, and the coil terminals of the switch cover being electrically connected to two lead lines of the coil, respectively, and at least one pair of projections and grooves engageable with each other, one of said projections and said grooves being formed on an outer cylindrical surface of the solenoid casing and the other of the projections and the grooves being formed on an inner cylindrical surface of the switch casing, and engagement of the projections and the grooves positioning the solenoid casing in a circumferential direction of the switch casing at a time of inserting the solenoid casing into the switch casing such that the lead lines of the coil

accommodated inside the solenoid casing are disposed in a vicinity of the coil terminals of the switch cover fixed to the switch casing.

JP 577 relates to a magnet switch for starters. However, JP 577 does not disclose or suggest a switch cover as recited in the claims. In JP 577 a magnet switch 3 has a switch casing 14 including a fixed wall 34. As is apparent from the figures of JP 577, the reference fails to disclose a switch cover, the two external terminals, the two coil terminals, or the two lead lines, as recited in the revised claims.

The Office Action admits that JP 577 fails to disclose at least one groove being mounted on one of the outer cylindrical surface of the solenoid casing and the switch casing to engage with each of the at least one projection. To overcome the admitted deficiency, the Office Action combines Nguyen and alleges that it would have been obvious to one of ordinary skill in the art to use the projection/groove mounting design of Nguyen in a solenoid switch of an automotive starter motor as recited in JP 577.

Nguyen relates to a magnet assembly in the form of a magnet encapsulated within a non-metallic containment body, and for particularly to an encapsulated magnet assembly constructed to eliminate heat induced magnetic losses that are known to occur during the process of making a magnet assembly (col. 1, lines 5-10 of Nguyen). Specifically, such encapsulated magnet constructions as disclosed in Nguyen are used in magnetically-driven applications such as pumps where it is essential that the metal magnet remain isolated from the displaced or pressurized liquid (col. 1, lines 15-18). Thus, Nguyen in no way relates to an automotive starter as disclosed in JP 577 or in the application. Accordingly, one of ordinary skill in the art would not be motivated to make the combination as alleged in the Office Action.

Furthermore, the problem being addressed in Nguyen is a reduction of pump efficiency in the ability of the pump to produce a desired output pressure as a result of magnetic decoupling during use (col. 2, lines 3-7). In contrast, JP 577 addresses difficulties in connecting magnet

switches of starters to coil housings that often result in the possibility that the coil housing would deform during construction (see paragraph [0004] of JP 577). As the applied references are attempting to resolve completely disparate problems, there is no suggestion in either of the references to make the combination as alleged in the Office Action. Accordingly, withdrawal of the rejection of claims 1, 5 and 6 under 35 U.S.C. §103(a) is respectfully requested.

Claims 2, 3 and 8 are rejected under 35 U.S.C. §103(a) as unpatentable over JP 577 in view of U.S. Patent Application Publication 2002/0145494 to Andoh et al. (Andoh).

Claims 2, 3 and 8 are allowable for at least their dependency on independent claim 1 for the reasons discussed above, as well as for the additional features recited therein. Furthermore, as Andoh fails to disclose or suggest the switch cover as recited in claim 1, Andoh fails to overcome the deficiencies of JP 577.

Additionally, as Andoh is silent regarding the existence of a pair of a projection and a groove that aid in the positioning of the solenoid casing in a circumferential direction of the switch casing at a time of inserting the solenoid casing into the switch casing such that the lead lines of the coil, accommodated inside the solenoid casing are disposed in a vicinity of the coil terminals of the switch cover fixed to the switch casing, withdrawal of the rejection of claims 2, 3 and 8 is respectfully requested.

Claim 4 is rejected under 35 U.S.C. §103(a) as unpatentable over JP 577 in view of U.S. Patent 4,987,396 to Bogner. The rejection is respectfully traversed.

Claim 4 is allowable for at least its dependency on independent claim 1 for the reasons discussed above, as well as for the additional features recited therein.

The Office Action alleges that JP 577 discloses all of the features recited in the claim except for the solenoid casing having a cylindrical portion protruding outward in the axial direction from the periphery of the circular opening of the bottom, and the sleeve is inserted inside the cylindrical portion of the solenoid casing. To overcome the deficiency, the Office

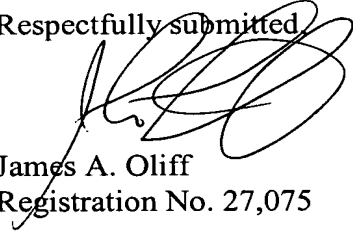
Action combines Bogner and alleges that Bogner discloses a starter switch solenoid casing including a cylindrical portion as recited in the rejected claim. The Office Action specifically refers to Fig. 1 in identifying sleeve 3, but fails to provide any identifying support for the additional features recited in the claim. Applicants submit that there is no such solenoid casing disclosed in Bogner. Thus, withdrawal of the rejection of claim 4 is respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-8 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,


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